

DC-30

SERVICE NOTES

SPECIFICATIONS

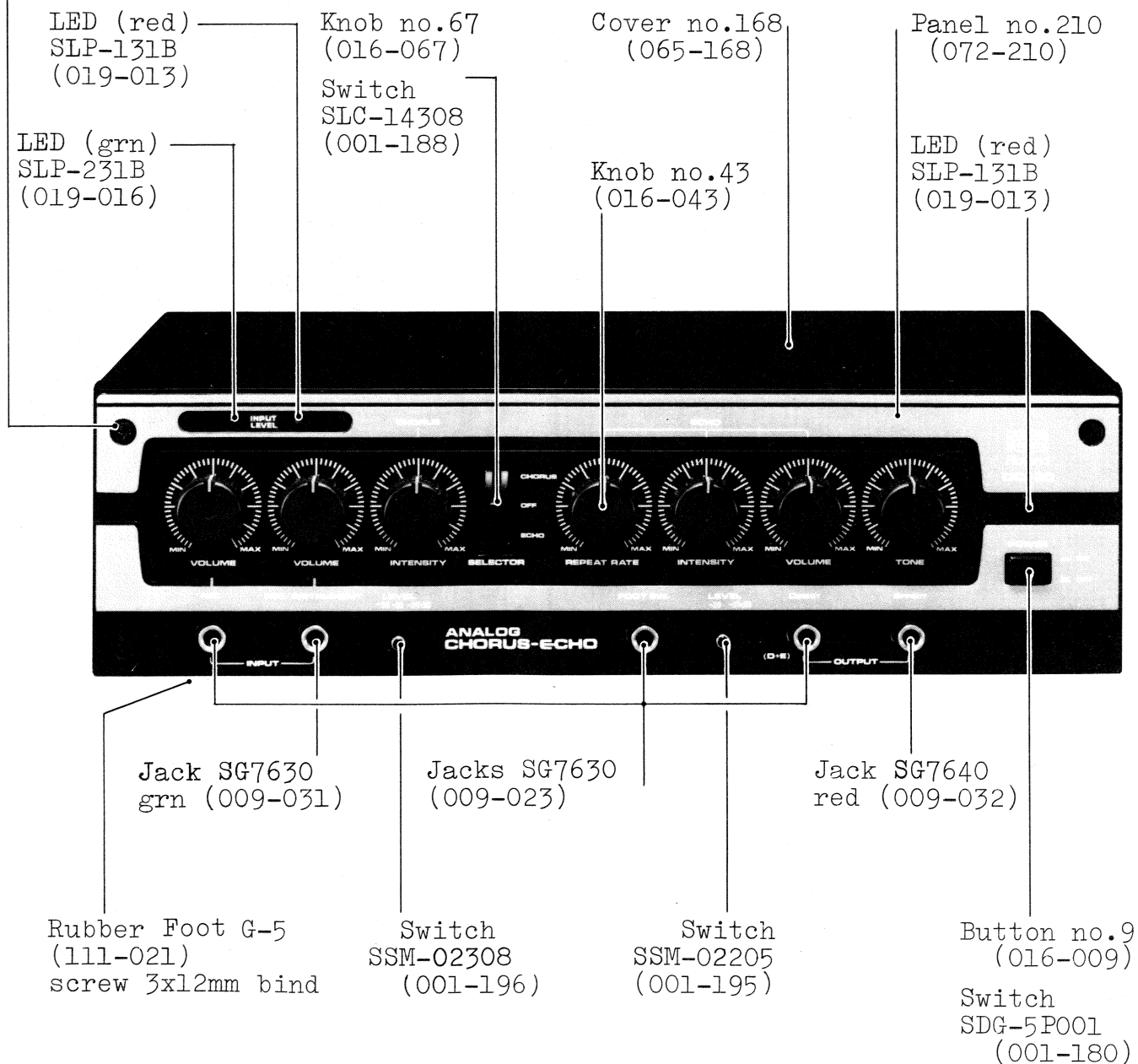
Chorus Delay Time 22mS — 44mS
 Echo Delay Time / Band Width . . . 40mS / 10KHz — 600mS / 1.5KHz
 Output Level / Impedance -20dB, -35dB/less than 600Ω
 S/N ratio Over 60dB
 Power Consumption 6W

Input Sensitivity / Impedance:
 Microphone -50dB/4.7KΩ
 Microphone/Instrument -50dB/4.7KΩ
 -35dB/470KΩ
 -20dB/470KΩ
 Dimensions 386(W) x 123(H) x 206(D)mm
 15.2(W) x 4.9(H) x 8.1(D)in
 Weight 3.7kg, 8.2 lbs
 Accessory Connection Cord 2.5m

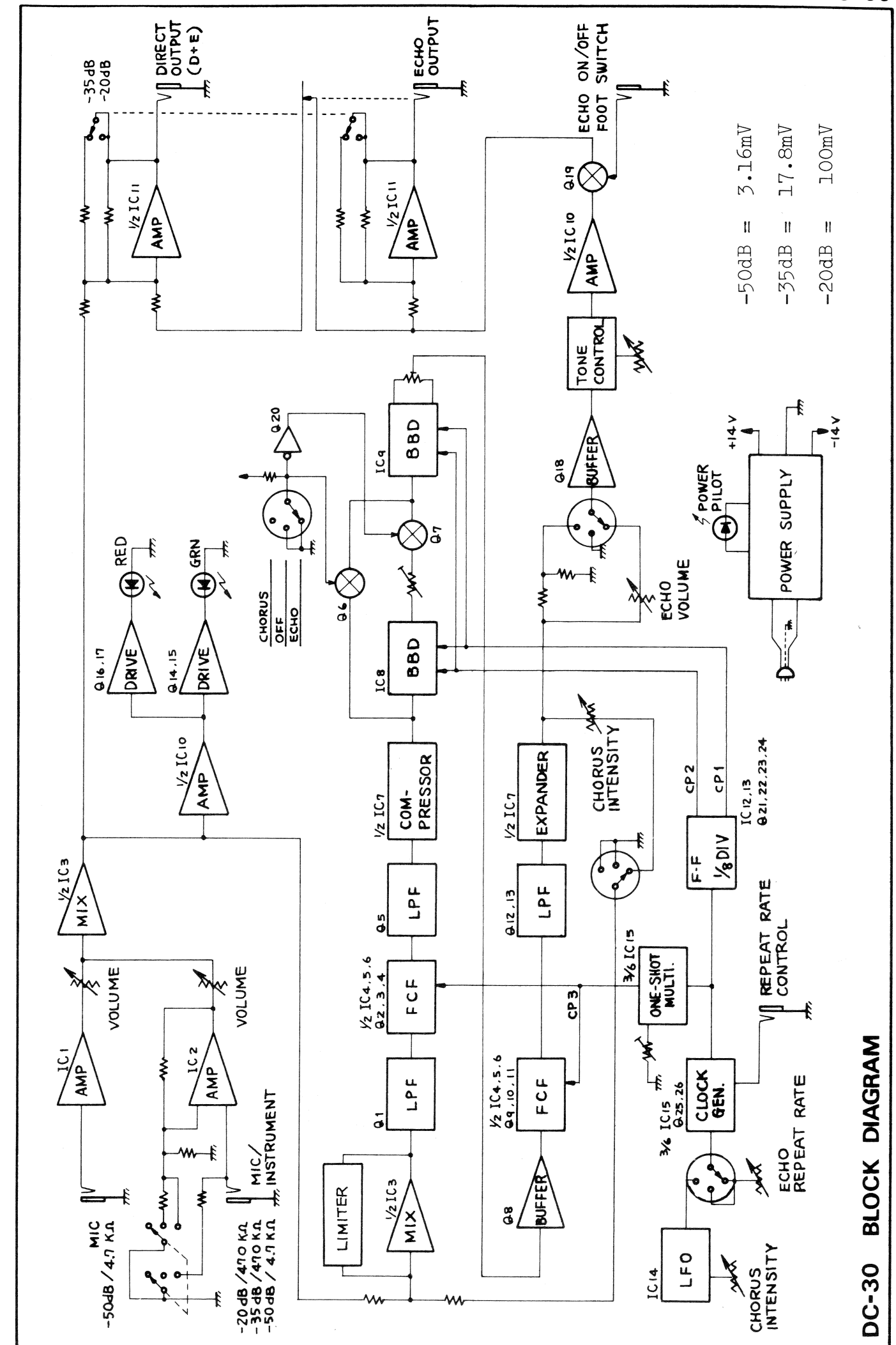
* See Block Diagram for the rest

COVER REMOVAL screws: four 4x8mm binding on the bottom

Screw 4x20mm -- Out of relation to
 oval Br chassis drawing out

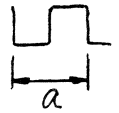
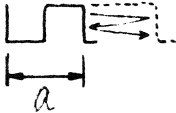
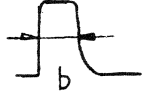
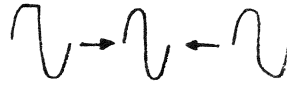
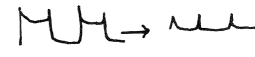
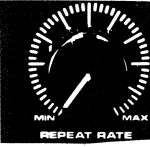
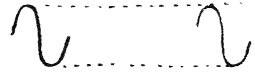


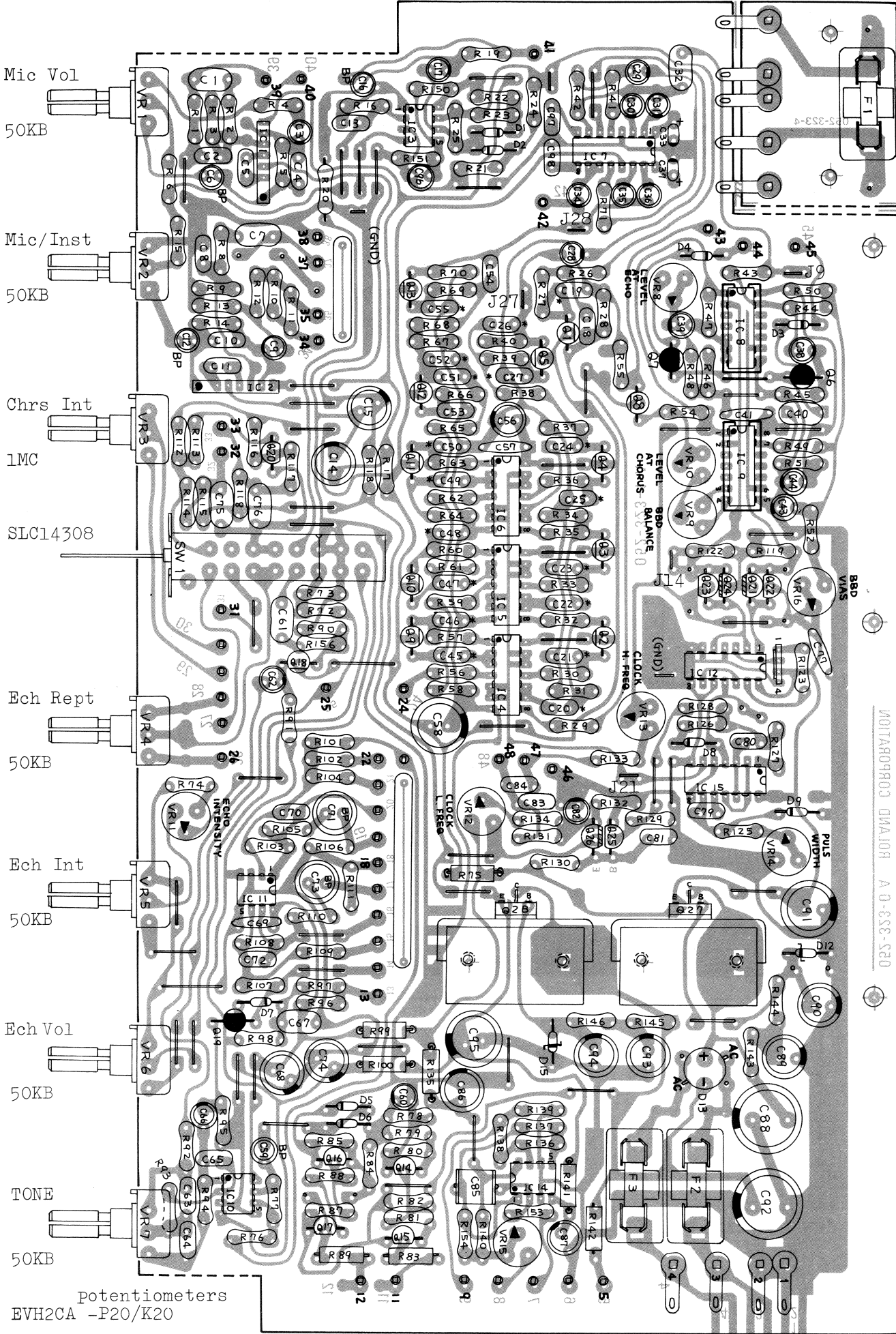
* Jack on rear panel TJ-252 (009-007)

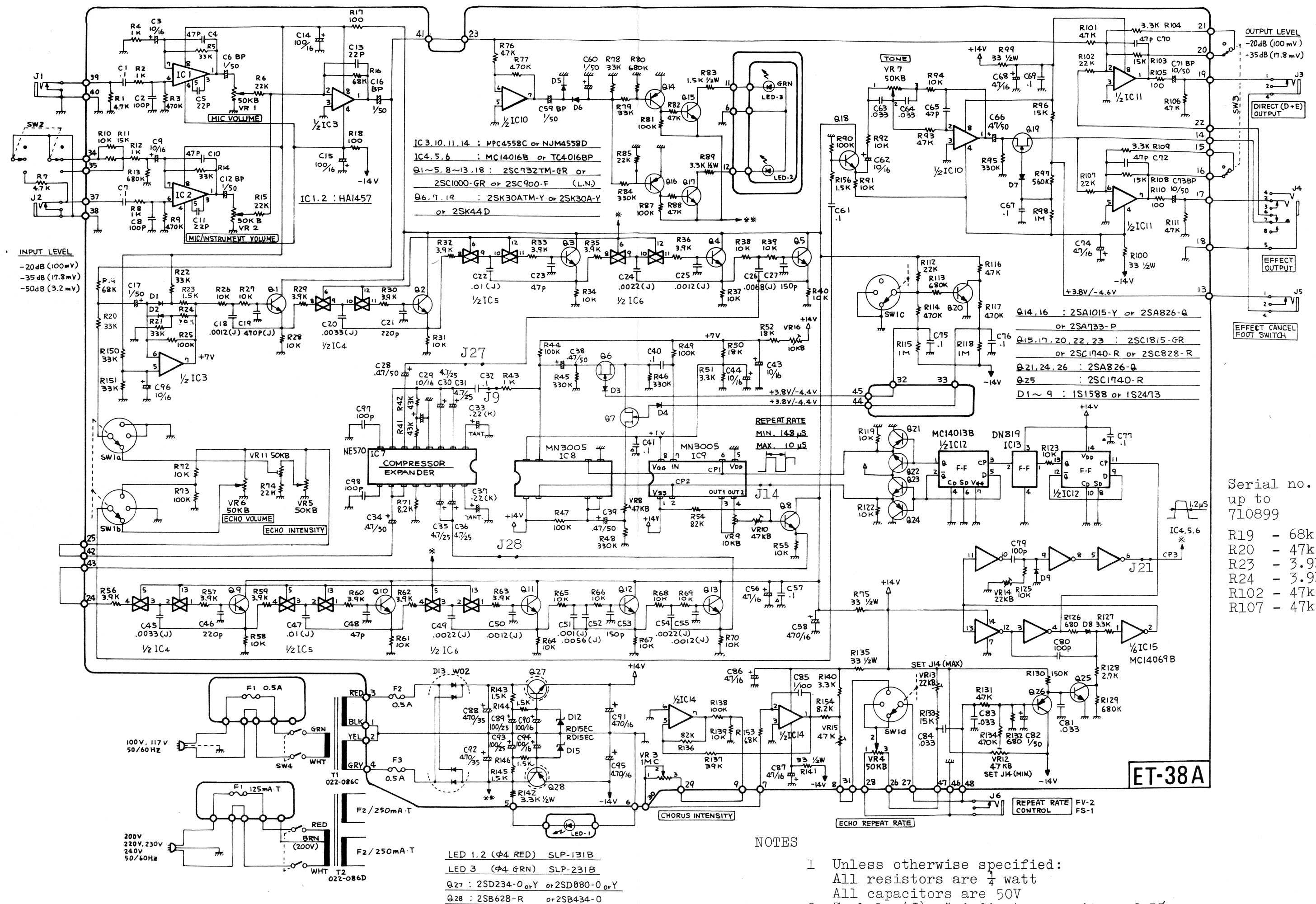


ADJUSTMENT

ET-38A (151-038A)

To Adjust	Connect oscil-loscope to	Set selec-tor at	Feed	Adjust	for
BBD CLOCK	J14	ECHO	—	VR12 VR13	 a = 10μs with REPEAT RATE at max. a = 148μs with REPEAT RATE at min.
BBD CLOCK	J14	CHORUS	—	VR15	 a = 10μs at narrowest
PULSE WIDTH	J21	ECHO	—	VR14	 b = 1.2μs (adjust REPEAT RATE for easier view)
BBD BIAS	pin 43 or pin 24	ECHO	1kHz	VR16	  operating point is in the center (V_b = 7 -- 7.5V) check: 1 distortion free over the rotation of REPEAT RATE 2 both peaks being flattened symmetrically as input increases
BBD CLOCK BALANCE	pin 43 or pin 24	ECHO	—	VR9	  clock componet is minimized
COMPRES EXPNDER LEVEL	J9 J28	CHORUS	1kHz	VR10	 J9 J28 compressor output expander input are of the same level
ECHO LEVEL	J28	ECHO	1kHz	VR8	 J28(CH) J28(EC) same amplitude as at CHORUS 
ECHO INTENS	—	ECHO	—	VR11	onset of oscillation 





Serial no.
up to
710899

R19 - 68k
 R20 - 47k
 R23 - 3.9k
 R24 - 3.9k
 R102 - 47k
 R107 - 47k

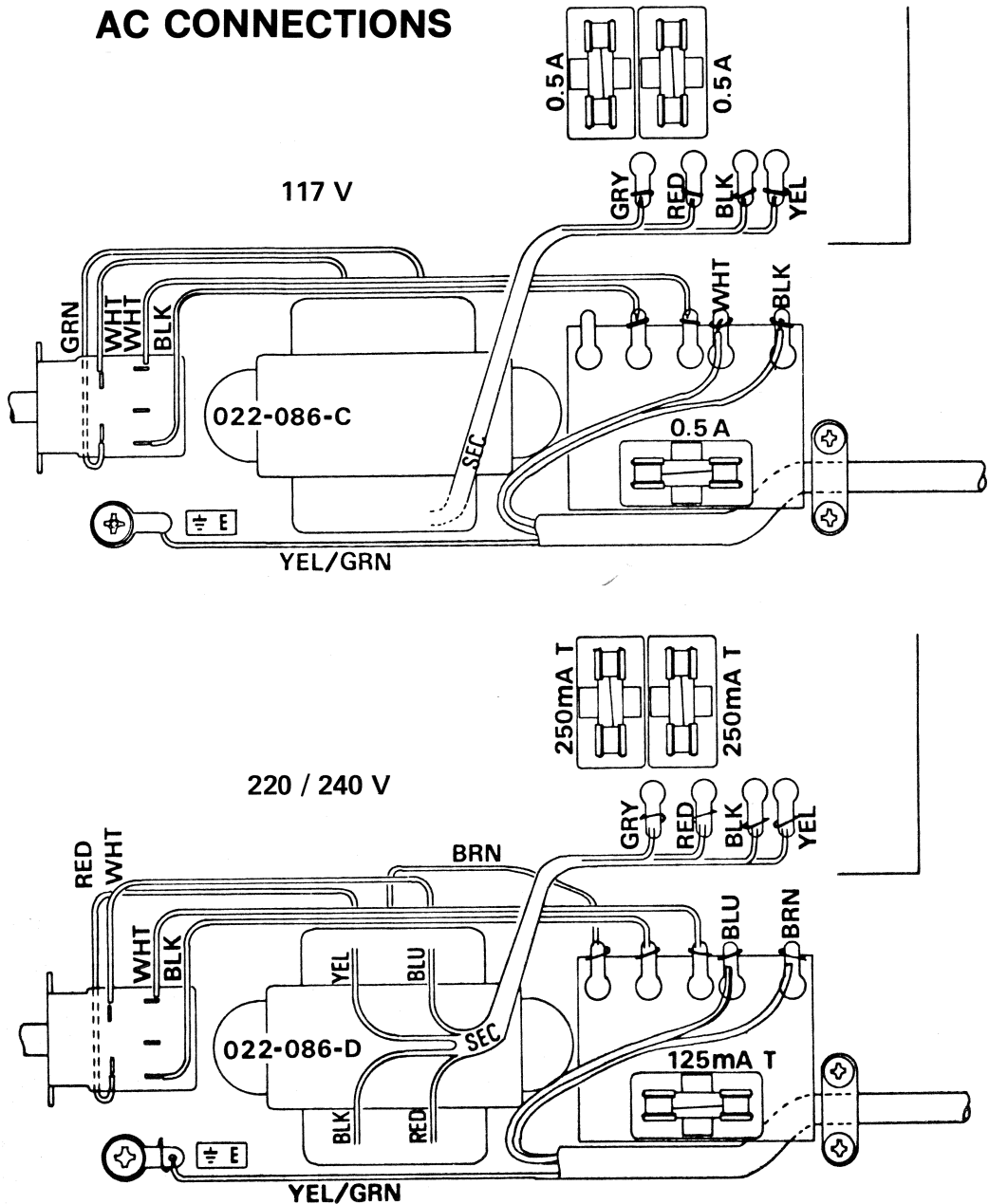
AC CONNECTIONS

Fuses SGA 0.5A
(008-024)

Fuse Holder
TF-758
(012-003)

Switch
SDG-5P001
(001-180)

Fuses
CEE 250mAT
(008-060)
CEE 125mAT
(008-057)

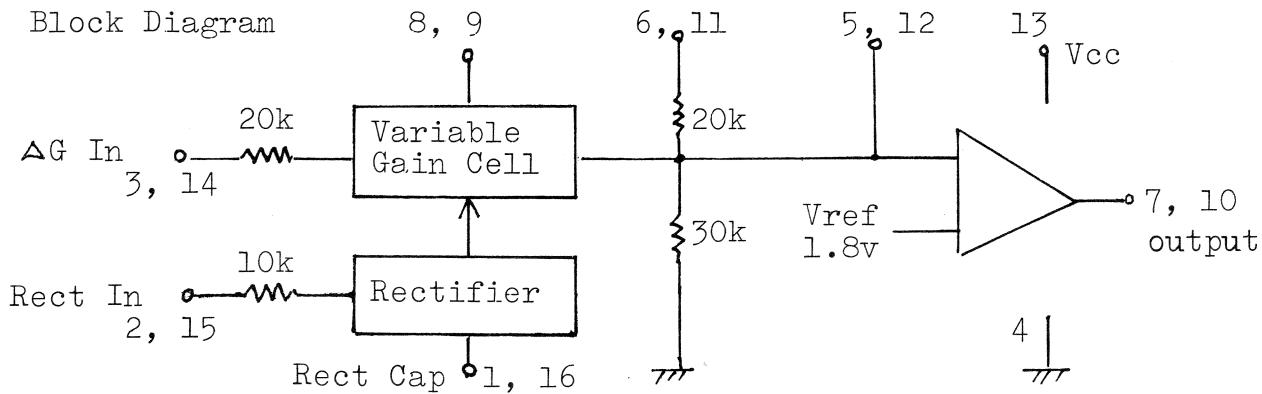


NOTE: When connection is made around AC, secure wires mechanically before soldering.

ANALOG COMPANDER IC7 NE570N

This is a dual gain control circuit in which either channel may be used as a dynamic range compressor or expander. Each channel has a full-wave rectifier to detect the average value of the signal --- a linearized, temperature compensated variable cell, and an OP amp.

Block Diagram



PARTS LIST

065-168	Cover no.168	case	ICs		
111-021	Rubber Foot	G-5	020-085	MN3005	BBD
072-210	Panel no.210		020-039	DN819	FF
061-207	Cover no.207	rear panel	020-176	MC14069BCP or	TC4069BP
061-194	Chassis no.194		020-179	MC14013BCP or	TC4013BP
			020-171	MC14016BCP or	TC4016BP
016-043	Knob no.43	rotary	020-080	HA1457	
016-067	Knob no.67	lever	020-097	μPC4558C or NJM4558D	
016-009	Button no.9	blk power switch	020-098	NE570N	
SWITCHES			POTENTIOMETERS		
001-188	SIC-14308	lever	028-576	EVH2CAP20(K20)B54	50KB
001-180	SDG-5P001	push power	028-592	EVH2CAP20(K20)C16	1MC
001-196	SSM-02308	slide input	030-465	SR19R or EVL/EVT	10KB trim.
001-195	SSM-02205	slide output	030-467	SR19R or EVL/EVT	22KB trim.
			030-469	SR19R or EVL/EVT	47KB trim.
JACKS					
009-023	SG7630		RESISTORS 1/2W		
009-007	TJ-252	rear	044-108	ERC12GK	33-ohm
009-031	SG7630	green	044-128	ERC12GK	1.5K-ohm
009-032	SG7640	red	044-132	ERC12GK	3.3K-ohm
022-086C	Power Transformer	100/117V			
022-086D	Power Transformer	220/240V			
123-001	Sleeve Nut (stand off)	no.1	CAPACITORS		
012-030	IC Socket	C03-014-350T	Electrolytic		
048-069	Heat Sink no.69	or no.32	032-190	ECEA50N1	1μF 50V Bipolar
			032-191	ECEA50N10	10μF 50V Bipolar
			032-232	0.22μF	35V tantalum
FUSES FUSE HOLDER			035-092	MHK 1μF 100V J	polystyren
008-024	SGA 0.500A	100/117V	Mylar 50V J(5%)		
008-060	CEE 250mAT	sec. 220/240V	035-201	470pF	
008-057	CEE 125mAT	prim.220/240V	035-205	0.001μF	
TRANSISTORS			035-206	0.0012μF	
017-103	2SC732TM-GR	or	035-209	0.0022μF	
	2SC2240-GR,	2SC1681-GR	035-211	0.0033μF	
	2SC1000-GR,	2SC1222-E	035-213	0.0056μF	
017-137	2SC1740-R		035-214	0.0068μF	
017-097	2SA826-Q		035-216	0.01μF	
017-077	2SB628-R	or 2SB434-0			
017-010	2SD234-0	or 2SD880-0/Y			
017-105	2SA1015-Y		PCBs		
017-106	2SC1815-GR		151-038A	ET-38A	assy
017-014	2SK30ATM-Y	FET	052-323A	ET-38A	less parts
DIODES			052-397	Peak LED	less parts
018-059	1S1588	or 1S2473, 1S1555	052-398	Pilot LED	less parts
018-096	RD15EC	or 05Z15U zener	052-323-4	Fuse	less parts
018-082	W-02	or IM152/152R rectifier			
019-013	SLP-131B	red LED			
019-016	SLP-231B	green LED			

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10545

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